

## Section 5: Ambient Air Quality Monitoring

### 5.1 Attainment of the 1-Hour Ozone Standard

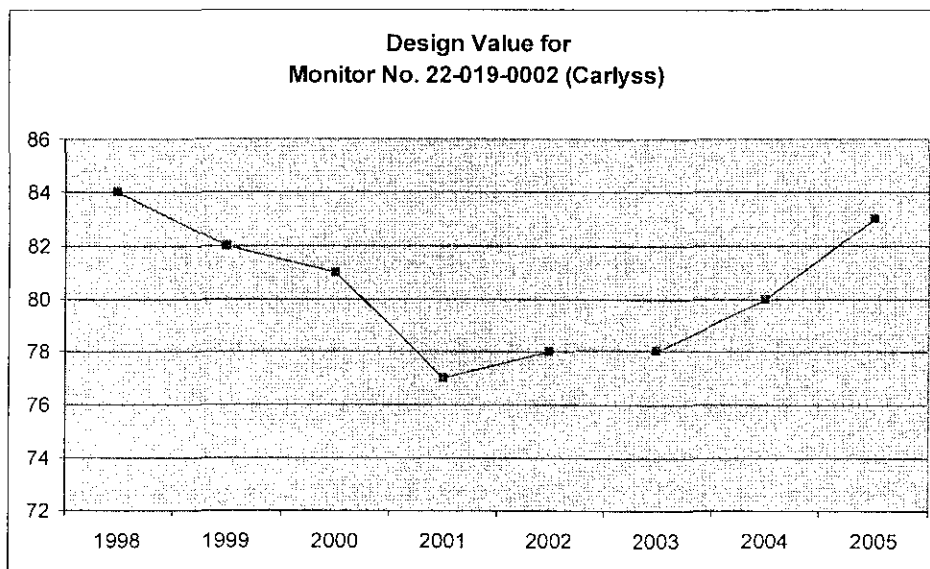
The monitoring sites in Calcasieu Parish (EPA AQS code 22 019 0002, 0008, and 0009) have been in operation since October 1983, September 1992 and October 1992 respectively and have operated in accordance with the requirements of 40 CFR 58 and the EPA-approved Quality Assurance Program Plan. The NAAQS for 1-hour ozone is 120 parts per billion (ppb) based on a 1-hour average sample. Because of rounding, a 1-hour monitor reading of 125 ppb is considered an exceedance of the 1-hour ozone standard, whereas a reading of 124 ppb is considered as meeting the standard.

For the 3-year period of 2003, 2004 and 2005, Calcasieu Parish network monitored attainment with the 1-hour ozone NAAQS through the end of calendar year 2005. The design value for Carlyss was 113 ppb; Westlake at 98 ppb; and Vinton at 106 ppb. EPA revoked the 1-hour ozone standard effective June 15, 2005.

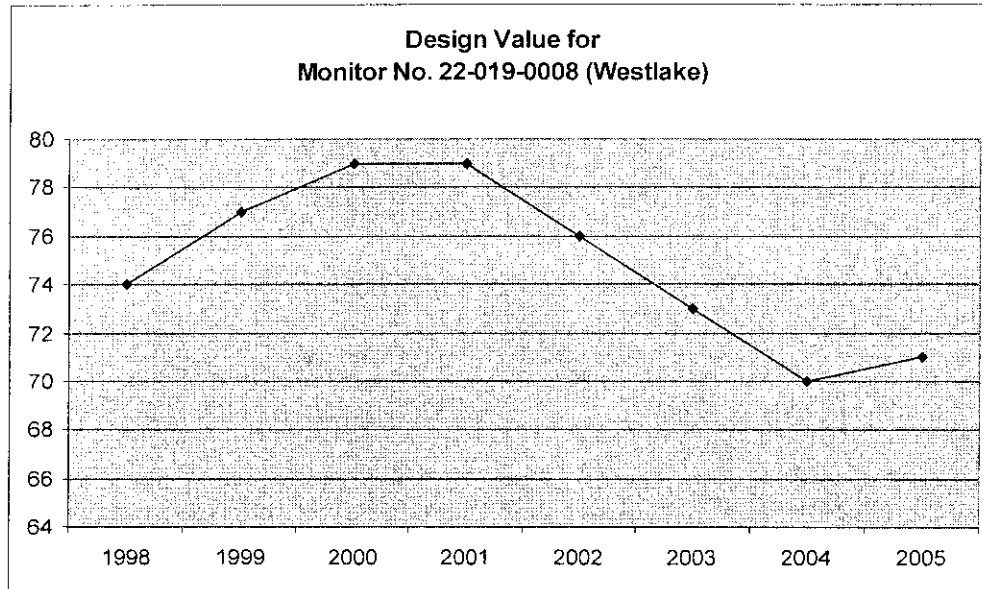
### 5.2 Attainment of the 8-Hour Ozone Standard

The NAAQS for 8-hour ozone is 80 ppb based on the three-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area. An 8-hour monitor reading of 85 ppb is considered an exceedance of the 8-hour ozone standard and a reading of 84 ppb is considered as meeting the standard. Figure 2a-2c illustrates the trend in 8-hour ozone design values in ppb for Calcasieu Parish sites from 1998 through 2005.

Figure 2a: 8-Hour Design Value for Monitor No. 22-019-0002



**Figure 2b: 8-Hour Design Value for Monitor No. 22-019-0008**



**Figure 2c: 8-Hour Design Value for Monitor No. 22-019-0009**

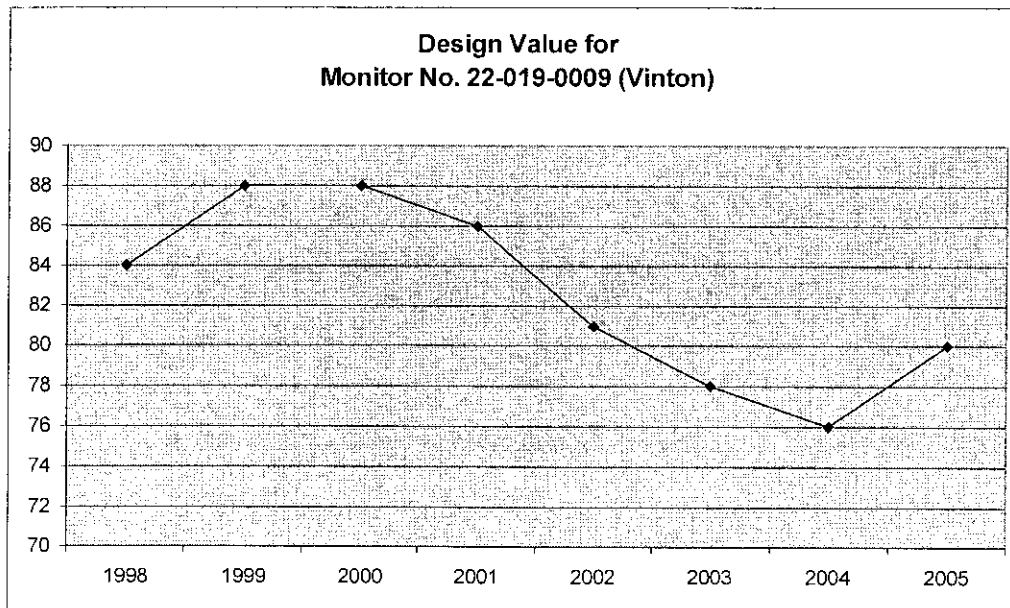


Table 5-1, 5-2, and 5-3 indicates that the area has monitored attainment for the latest five complete three-year periods. The area has monitored attainment for the latest six complete three-year periods for Carlyss and Westlake, and has monitored attainment for the latest four complete three-year periods for Vinton.

**Table 5-1 Calcasieu Parish  
Carlyss Monitor # 22-019-0002  
8-Hour Ozone Design Values 1998-2005**

<b>Year</b>	<b>1st</b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b># of days &gt; 84 ppb</b>	<b>Design Value (ppb)</b>
1998	92	92	91	90	7	84
1999	77	77	74	73	0	82
2000	94	87	83	82	2	81
1999	77	77	74	73	0	82
2000	94	87	83	82	2	81
2001	84	81	78	78	0	77
2000	94	87	83	82	2	81
2001	84	81	78	78	0	77
2002	81	76	76	74	0	78
2001	84	81	78	78	0	77
2002	81	76	76	74	0	78
2003	100	90	87	84	3	78
2002	81	76	76	74	0	78
2003	100	90	87	84	3	78
2004	87	84	83	82	1	80
2003	100	90	87	84	3	78
2004	87	84	83	82	1	80
2005	91	90	86	85	4	83

**Table 5-2 Calcasieu Parish  
Westlake Monitor # 22-019-0008  
8-Hour Ozone Design Values 1998-2005**

<b>Year</b>	<b>1st</b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b># of days &gt; 84 ppb</b>	<b>Design Value (ppb)</b>
1998	85	85	79	78	2	74
1999	81	78	77	77	0	77
2000	91	88	87	84	3	79
1999	81	78	77	77	0	77
2000	91	88	87	84	3	79
2001	83	82	79	77	0	79
2000	91	88	87	84	3	79
2001	83	82	79	77	0	79
2002	72	70	70	68	0	76
2001	83	82	79	77	0	79
2002	72	70	70	68	0	76
2003	81	78	77	75	0	73
2002	72	70	70	68	0	76
2003	81	78	77	75	0	73
2004	80	77	72	67	0	70
2003	81	78	77	75	0	73
2004	80	77	72	67	0	70
2005	77	76	73	72	0	71

**Table 5-3 Calcasieu Parish  
Vinton Monitor # 22-019-0009  
8-Hour Ozone Design Values 1998-2005**

<b>Year</b>	<b>1st</b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b># of days# of days &gt; 84 ppb</b>	<b>Design Value (ppb)</b>
1998	99	92	88	86	4	84
1999	95	93	92	88	6	88
2000	95	94	91	90	7	88
1999	95	93	92	88	6	88
2000	95	94	91	90	7	88
2001	93	92	80	80	2	86
2000	95	94	91	90	7	88
2001	93	92	80	80	2	86
2002	76	76	74	73	0	81
2001	93	92	80	80	2	86
2002	76	76	74	73	0	81
2003	95	85	84	83	2	78
2002	76	76	74	73	0	81
2003	95	85	84	83	2	78
2004	84	82	82	73	0	76
2003	95	85	84	83	2	78
2004	84	82	82	73	0	76
2005	90	89	85	85	4	80